

## PRODUCT DATA SHEET

## SikaPlast®-2004 NS

Water reducing and set retarding concrete admixture

## DESCRIPTION

SikaPlast®-2004 NS is the latest development of superplasticizer for concrete. It meets the requirements for high range water reducing superplasticizers.

## USES

SikaPlast®-2004 NS is a unique multipurpose superplasticiser that is particularly suitable for the production of ready mixed concrete. Additionally it provides high water reduction and improved fresh concrete characteristics.

With its outstanding cost / performance SikaPlast®-2004 NS is used for the following:

- A wide range of applications where excellent workability is requested
- Concrete with high water reduction
- High efficient concrete applications

## FEATURES

SikaPlast®-2004 NS is a powerful superplasticiser based on advanced technology which gives the following advantages:

- Strong water reduction, resulting in high density and high strength
- Improved water tightness
- Less sensitive against variations in aggregates and / or different cement types
- High efficiency even at low dosage rates
- Extended workability in conjunction with subsequent strength development
- Superior plasticising effect, resulting in improved flow, placing and compaction characteristics
- Water reduction up to 20-30 % depending on dosage\*
- 28 days strength improved by up to 30 %\*

\* This will depend on dosage and mix design

## CERTIFICATES AND TEST REPORTS

Complies with ASTM C494 - 81 type F & G, IS 9103

## PRODUCT INFORMATION

|                       |                                                                                                          |
|-----------------------|----------------------------------------------------------------------------------------------------------|
| Composition           | Modified Polycarboxylate                                                                                 |
| Packaging             | 230 kg HDPE carboy                                                                                       |
| Appearance and colour | Light Brown Liquid                                                                                       |
| Shelf life            | 12 months from date of production if stored properly in undamaged unopened, original sealed packaging.   |
| Storage conditions    | Store in dry conditions at temperatures between +10°C and +40°C. Protect from direct sunlight and frost. |
| Density               | ~1.08 kg/l at 25°C                                                                                       |
| pH-Value              | ≥ 6                                                                                                      |

## APPLICATION INFORMATION

|                           |                                                                                                                                                                                                                                                                                                                                                    |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Recommended dosage</b> | Standard dosage will vary from 0.5% to 1.5% by weight of cement. Exact dosage rates are dependent on the quality of cement, aggregates, water/cement ratio and ambient temperature. Therefore, in many cases it is advisable to carry out trial mixes.<br>Higher dosage may be used if agreed by engineer and consultant.<br>Stir well before use. |
| <b>Compatibility</b>      | SikaPlast®-2004 NS may be combined with many other Sika® products. Compatible with all types of cements and cementitious materials.<br>Important: Always conduct trials before combining products in specific mixes and combinations. Compatible with all types of cement and cementitious materials.                                              |

## BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## FURTHER DOCUMENTATION

Excessive water addition or overdosing may cause bleeding or segregation.  
Overdosing may cause extension of initial and final setting times.  
If frozen and / or if precipitation has occurred, SikaPlast®-2004 NS may be used after thawing slowly at room temperature and after intensive mixing.

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### DISPENSING

SikaPlast®-2004 NS can be added into the mixing water or directly into the concrete mixer after 50 – 70% of the mixing water has been added.  
The addition of SikaPlast®-2004 NS to dry aggregate or cement is not recommended.  
To achieve optimum performance a minimum wet mixing time, which is depending on the mixing conditions and the mixer performance, of 60 seconds is recommended.

## LOCAL RESTRICTIONS

Sika Bangladesh Limited

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Please note that as a result of specific local regulations the declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.